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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/523,149

01/24/2005

Yossi Kaplan

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12/16/2009

SMITH FROHWEIN TEMPEL GREENLEE BLAHA, LLC

Two Ravinia Drive

Suite 700

ATLANTA, GA 30346

EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

12/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed September 1 2009 regarding claims 41 and 53 have been fully considered but they are not persuasive. Regarding claims 41 and 53, the applicant's representative asserts that Tang does not describe the comparison of sequences of events generated during a drive and analysis to overcome the problem of similar sequences for neighboring roads. The examiner respectfully disagrees. Claims 41 and 53 disclose conducting analysis of new cellular network events related to a particular mobile unit Tang reads on this limitation by comparing the MAHO vector to the RSSI information vector (see col. 5, lines 20-35). Therefore, Tang reads on the claimed limitation of conducting analysis on a sequence of cellular network events. The mobile telephone of Yang is not static as indicated by the applicant. The mobile telephone is able to handoff as it travels from one cell to another (see col. 3, lines 53-67). Therefore the mobile telephone receives the MAHO list within each cell. The examiner interprets the processing of new sequence of cellular network events as conducting analysis in order to correlate the new sequence of cellular network events to a physical geographic location, and this limitation is taught by Tang for the reasons disclosed above (it worth noting that the claim does not disclose what the processing entails, i.e., how is the processing accomplished; hence the interpretation of the limitation "whereas the new sequence of cellular network events is processed to overcome the problem of similar sequences"). The examiner also maintains that the MAHO list received by the mobile telephone

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from the MSC broadly reads on the limitation handover related messages as the MAHO list includes the signal readings of the base stations of cells that the mobile telephone can handover to. The 35 U.S.C. 102(e) rejection of claims 41 and 53 is maintained.

Applicant's arguments, see page 10 of the remarks, filed September 1 2009, with respect to the rejection(s) of claim(s) 52 under 35 U.S.C. § 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of different interpretation of previously applied reference.

Applicant's arguments see pages 10-11 of the remarks, filed September 1 2009, with respect to claims 54, 60-62, and 66 have been fully considered and are persuasive. The 35 U.S.C. § 102(e) of claims 54 and 66 and the 35 U.S.C. § 103(a) of claims 60-62 has been withdrawn.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 41, 52, and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by **Tang 6,799,046**.

Regarding **claim 41**, Tang discloses a method for correlating a vehicle with the road on which it travels based on cellular communication, the method comprising the steps of: gathering a sequence of cellular network events related to one or more mobile units (dividing a cell into multiple sections and measuring the signal strength at each section location, see figs. 3-5, col. 4, lines 26-44), and a physical, geographically-defined, accurate location of each mobile unit determined by a physical geographically-defined, accurate location determination system when each cellular network event occurs (measuring the RSSI and recording the location information associated with the RSSI, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19), such cellular network events and physical, geographically-defined accurate locations being gathered during one or more drives and then stored as entries in a learnt database as a location reference (measuring the RSSI and recording the RSSI and the location associated with the measured RSSI in a profile database, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19); and conducting analysis of a new sequence of cellular network events related to a particular mobile unit, the new sequence of cellular network activity events being gathered during a new drive and is independent of physical, geographically-defined location information (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27), in conjunction with the learnt database to correlate the new sequence of cellular

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network events to a physical geographic location (comparing the MAHO vector with the information profile database in order to determine a location of the mobile telephone, see figs. 3-5, col. 5, lines 20-49); whereas the new sequence of cellular network events is extrinsically collected from the base stations or the controllers or main switching systems or communication links between them (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27) and whereas the new sequence of cellular network events is processed to overcome the problem of similar sequences for neighboring routes (MAHO vector matching with the signal information profile database to determine if mobile telephone is in the same location as one of the locations in the signal information profile database see figs. 3-5, col. 5, lines 20-49).

Regarding **claim 53**, Tang discloses a method for correlating a vehicle with the road on which it travels based on cellular communication, the method comprising the steps of: gathering a sequence of cellular network events related to one or more mobile units (dividing a cell into multiple sections and measuring the signal strength at each section location, see figs. 3-5, col. 4, lines 26-44), and a physical, geographically-defined, accurate location of each mobile unit when each event occurs (measuring the RSSI and recording the location information associated with the RSSI, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19), and storing this information into a learnt database as location references (measuring the RSSI and recording the RSSI and the location associated with the measured RSSI in a profile database, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19); and conducting analysis of a new sequence of cellular

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network events related to a particular mobile unit on a new drive independent of the physical, geographic location of the particular mobile unit (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27) in conjunction with the learnt database to identify a match (comparing the MAHO vector with the information profile database in order to determine a location of the mobile telephone, see figs. 3-5, col. 5, lines 20-49); wherein the new sequence of cellular network events is processed to overcome the problem of similar sequences for neighboring routes (MAHO vector matching with the signal information profile database to determine if mobile telephone is in the same location as one of the locations in the signal information profile database see figs. 3-5, col. 5, lines 20-49); and wherein the step of conducting analysis is based on extraction of handover related messages, only from the communication links between the switch and the base station controllers in a cellular network (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27).

Regarding **claim 52** as applied to claim 41, Tang further discloses wherein the step of conducting analysis is based only on a cell ID data (section location associated with the RSSI information, see fig. 5, col. 5, lines 3-19).

***Allowable Subject Matter***

4. Claims 47, 48, 50, 51, 54, 60-62, 65 and 66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 63 is allowed.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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OA

/Charles N. Appiah/

Supervisory Patent Examiner, Art Unit 2617